

JORDAN RIVER BASIN

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10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT
 (Hydrologic bench mark station)

LOCATION.--Lat 40°46'48", long 111°48'19", in NE^{1/4}SE^{1/4}NW^{1/4} sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi northeast of Fort Douglas.

DRAINAGE AREA.--7.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft³/s, May 28, 1983, maximum gage height, 3.81 ft, May 17, 1984; minimum, 0.17 ft³/s, Nov 20, 1992, possible ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 27	1300	*11	1.25	Apr 27	1415	11	*1.32

Minimum discharge, 0.74 ft³/s, Oct 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.75	1.3	1.4	1.3	e1.5	2.0	7.3	10	4.5	2.4	1.2	0.86
2	0.75	1.2	1.4	1.4	e1.4	2.5	7.9	9.8	4.6	2.3	1.3	0.84
3	0.75	1.2	1.3	1.4	e1.6	1.9	8.1	9.4	4.5	2.3	1.3	0.83
4	0.77	1.2	1.3	1.4	e1.6	2.0	8.3	9.1	4.3	2.2	1.2	0.83
5	0.74	1.2	1.3	1.4	e1.6	2.0	9.0	9.0	4.2	2.2	1.2	0.82
6	0.76	1.2	1.3	1.5	e1.4	2.0	9.5	8.7	4.1	2.1	1.1	0.91
7	0.77	1.3	1.3	1.7	e1.6	2.2	9.0	8.7	4.0	2.0	1.1	1.1
8	0.79	1.3	1.2	1.6	1.5	2.0	8.7	8.5	3.9	1.9	1.1	1.4
9	0.94	1.3	1.3	1.6	1.5	2.4	8.4	8.3	3.9	1.9	1.1	1.1
10	0.91	1.3	1.3	1.5	1.5	2.2	9.0	8.1	3.8	1.8	1.1	1.0
11	0.96	1.3	1.3	1.5	1.5	2.2	9.0	8.0	3.7	1.8	1.0	1.0
12	0.90	1.2	1.3	1.5	1.5	2.2	8.8	7.6	3.6	1.7	1.00	1.1
13	0.86	1.3	1.5	1.5	1.6	2.9	9.0	7.3	3.6	1.6	1.00	1.0
14	0.88	1.3	1.4	1.8	1.6	2.6	9.0	7.1	3.5	1.6	0.98	0.99
15	0.85	1.3	1.3	2.1	1.6	2.7	9.6	6.9	3.4	1.5	0.96	0.95
16	0.88	1.3	1.7	1.3	1.7	2.6	9.4	6.6	3.3	1.5	0.93	1.1
17	0.90	1.3	1.4	1.4	1.7	2.5	8.7	6.4	3.2	1.5	0.92	1.2
18	0.91	1.3	1.4	1.5	1.8	2.6	8.1	6.2	3.1	1.7	0.92	1.5
19	0.96	1.3	1.4	1.5	1.8	2.6	7.8	6.1	3.1	1.7	0.91	1.3
20	0.96	1.3	1.4	1.5	2.0	2.8	7.7	6.0	3.0	1.6	0.92	1.2
21	0.96	1.3	1.4	1.4	1.9	3.2	7.5	6.5	3.0	1.6	0.94	1.2
22	0.95	2.0	1.4	1.4	2.0	3.9	7.6	6.3	3.0	1.5	0.92	1.1
23	0.94	1.7	1.3	1.3	2.1	4.3	7.8	5.9	3.0	1.5	0.91	1.1
24	0.91	1.5	1.2	1.5	2.1	4.3	7.9	5.8	2.9	1.4	0.91	1.1
25	0.94	1.7	1.3	1.5	2.1	4.0	8.0	5.6	2.8	1.5	0.91	1.0
26	0.95	1.5	1.3	1.4	1.8	4.1	8.6	5.4	2.7	1.4	0.89	1.1
27	0.94	1.6	1.3	1.5	2.0	4.6	10	5.2	2.6	1.4	0.89	1.1
28	0.95	1.5	1.3	1.5	2.1	5.3	10	5.1	2.5	1.4	0.89	1.0
29	0.96	1.4	1.3	1.6	---	5.6	10	4.8	2.5	1.3	0.87	1.0
30	1.0	1.5	1.3	e1.5	---	6.2	10	4.7	2.4	1.3	0.87	1.0
31	1.6	--	1.4	e1.4	---	6.7	---	4.6	--	1.3	0.85	--
TOTAL	28.09	41.1	41.7	46.4	48.1	99.1	259.7	217.7	102.7	52.9	31.09	31.73
MEAN	0.906	1.370	1.345	1.497	1.718	3.197	8.657	7.023	3.423	1.706	1.003	1.058
MAX	1.6	2.0	1.7	2.1	2.1	6.7	10	10	4.6	2.4	1.3	1.5
MIN	0.74	1.2	1.2	1.3	1.4	1.9	7.3	4.6	2.4	1.3	0.85	0.82
AC-FT	56	82	83	92	95	197	515	432	204	105	62	63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

MEAN	1.973	2.040	1.936	1.962	2.389	4.567	9.264	12.91	6.768	3.373	2.176	1.851
MAX	3.86	3.53	3.37	3.46	7.00	12.8	22.2	50.5	29.7	9.22	5.77	4.10
(WY)	1984	1984	1984	1971	1986	1983	1986	1983	1983	1983	1983	1983
MIN	0.68	0.93	0.91	0.83	1.00	1.06	1.79	1.55	0.95	0.60	0.44	0.47
(WY)	1991	1991	1964	1964	1964	1964	1990	1990	1992	1990	1990	1990

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1964 - 2002
ANNUAL TOTAL	827.30	1000.31	
ANNUAL MEAN	2.267	2.741	4.274
HIGHEST ANNUAL MEAN			12.5
LOWEST ANNUAL MEAN			1.12
HIGHEST DAILY MEAN	8.3 Apr 28	10 Apr 27	95 May 28 1983
LOWEST DAILY MEAN	0.73 Sep 28	0.74 Oct 5	0.38 Aug 9 1990
ANNUAL SEVEN-DAY MINIMUM	0.74 Sep 25	0.76 Oct 1	0.39 Sep 10 1990
ANNUAL RUNOFF (AC-FT)	1640	1980	3100
10 PERCENT EXCEEDS	5.9	7.8	9.8
50 PERCENT EXCEEDS	1.5	1.5	2.5
90 PERCENT EXCEEDS	0.83	0.92	1.1

e Estimated

